

WHAT IS CLAIMED IS:

1. A fullerene whisker constituted from a fullerene derivative obtained by chemically modifying a fullerene.

2. The fullerene whisker as described in claim 1, wherein the fullerene derivative is a methanofullerene.

3. The fullerene whisker as described in claim 2, the methanofullerene is obtained by chemically modifying a fullerene with a malonic acid derivative.

4. The fullerene whisker as described in claim 3, wherein the malonic acid derivative is dialkyl malonate in which an alkyl group has 1 to 4 carbon atoms.

5. The fullerene whisker as described in claim 1, having an average diameter of 100 nm to 1 μ m and an average length of 1 to 100 μ m.

6. The fullerene whisker as described in claim 1, wherein the fullerene derivative is obtained by chemically modifying C₆₀ fullerene.

7. A production process for a whisker of a fullerene derivative comprising steps of:

bringing a good solvent solution dissolving the fullerene derivative obtained by chemically modifying a fullerene with a malonic acid derivative into contact with a poor solvent for the fullerene derivative to form a liquid-liquid interface between the good solvent solution and the poor solvent and depositing the whisker in the liquid-liquid interface.

8. The production process for a whisker as described in claim 7, wherein the malonic acid derivative is dialkyl malonate in which an alkyl group has 1 to 4 carbon atoms, and the fullerene derivative is a methanofullerene.

9. The production process for a whisker as described in claim 8, wherein the good solvent for the methanofullerene is a hydrocarbon base solvent.

10. The production process for a whisker as described in claim 9, wherein the hydrocarbon base solvent is at least one selected from aromatic

hydrocarbon compounds, aliphatic hydrocarbon compounds and alicyclic hydrocarbon compounds.

11. The production process for a whisker as described in claim 8, wherein the poor solvent for the methanofullerene is an alcohol base solvent.

12. The production process for a whisker as described in claim 11, wherein the alcohol base solvent is at least one selected from aliphatic monohydric alcohols having 1 to 6 carbon atoms.